Northwestern Journal of International Law & Business

Volume 8
Issue 3 *Winter*

Winter 1988

Compulsory Patent Licensing in the United States: An Idea Whose Time Has Come

Cole M. Fauver

COMMENTS

Compulsory Patent Licensing in the United States: An Idea Whose Time Has Come

I. INTRODUCTION

When a business decides whether to compete in today's world marketplace, it must consider the extent to which its ideas and designs will be protected from misappropriation around the world. Despite its international ramifications, however, patent protection is territorial,[1] operating only within the jurisdiction granting the patent. Companies wishing to compete overseas must obtain patents from each country in which protection is sought. While several treaties and international congresses[2] have been successful in creating fundamental equity and uniformity among national patent laws,[3] complete uniformity is difficult to achieve due to different philosophies regarding free enterprise, monopoly rights, and technological development.

Recognizing the territorial limits of patent protection, a comparison

---

[1] While each nation's laws differ to some extent, a patent is usually a document which a government issues, on application, giving exclusive legal rights to the invention. The invention can only be manufactured, sold, used or imported in the issuing country with the authorization of the patent holder. WORLD INTELLECTUAL PROPERTY ORGANIZATION, PUB. NO. 620(E), LICENSING GUIDE FOR DEVELOPING COUNTRIES 17, 27 (1977).

[2] *E.g.*, Paris Convention for the Protection of Industrial Property, *opened for signature* Mar. 20, 1883, *as amended*, 21 U.S.T. 1583, T.I.A.S. No. 6923, 828 U.N.T.S. 305 [hereinafter Paris Convention].

[3] The United States has often been a willing participant in such international approaches. *See* Paris Convention, *supra* note 2. A more recent agreement has tried to link the computer storage systems of the United States and other countries to facilitate patent searches and thereby promote exchange. Memorandum of Understanding on Trilateral Cooperation in the Field of Industrial Property, Oct. 19, 1983, United States-Japan-EEC (original document on file with the Office of Public Affairs of the Patent and Trademark Office); *see U.S., Japan, Europe Sign Agreement on Patent Cooperation*, BUS. AM., Oct. 31, 1983, at 13.

of patent laws may nevertheless be useful in identifying the most beneficial aspects of particular patent systems. One aspect common throughout the world, but virtually absent in the United States, is compulsory licensing.[4] Compulsory licensing enables the government granting the patent to force the patentee to license the invention if the government does not approve of the patent's use. Consequently, another individual or company is allowed to make and sell the invention.

The threat of compulsory licensing encourages parties to grant licenses voluntarily.[5] Voluntary licensing presents an attractive option for the foreign patent holder because it is a superior method for penetrating a foreign market with little or no investment and labor contribution, advantages absent when manufacturing occurs directly in the foreign country.[6] Voluntary licensing also reduces the risks involved in starting operations in a foreign country by eliminating the necessity of having to understand and work within the confines of an unfamiliar production environment. Businesses with extensive resources, however, may prefer direct production in a foreign country over licensing to a local company. Many United States enterprises prefer this approach due to the greater profits possible when a company decides to produce a good itself.[7] However, a foreign jurisdiction with strong compulsory license provisions may actually inhibit this preferred method.[8] In compulsory licensing situations a court dictates the terms of the license,[9] and the licensor's wishes may be ignored.

Compulsory licensing provisions further the same goal of general

---

4 As the United States Supreme Court recently stated, "Compulsory licensing is a rarity in our patent system, and we decline to manufacture such a requirement . . . ." Dawson Chemical Co. v. Rohm & Haas Co., 448 U.S. 176, 215 (1980).

5 Henry, *Multi-National Practice in Determining Provisions in Compulsory Patent Licensing*, 11 J. INT'L L. & ECON. 325 (1976). *See also* S. LADAS, PATENTS, TRADEMARKS AND RELATED RIGHTS—NATIONAL AND INTERNATIONAL PROTECTION 427, § 248 (1975)("The practical value of the existence of compulsory license provisions in the Patent Law is that the threat of it usually induces the grant of contractual licenses on reasonable terms, and thus the objective of actually working the invention is accomplished.").

6 Jones, *Fundamentals of International Licensing Agreements and Their Application in the European Community*, 7 INT'L LAW. 78, 80 (1973).

7 *Id.* at 82.

8 A. SEIDEL, WHAT THE GENERAL PRACTITIONER SHOULD KNOW ABOUT PATENT LAW AND PRACTICE 97 (4th ed. 1984).

9 Voluntary licensing terms can often be arranged to leave the original patentee in a most advantageous position. In United States v. General Electric Co., 272 U.S. 476 (1925), the Supreme Court upheld a licensing agreement which specified the prices to be charged by the licensee and the royalty rate which would rise with the licensee's share of the light bulb market. The licensee thus had a disincentive to compete with General Electric, which meant General Electric remained in an essentially monopolist position. When a government grants a compulsory license, the courts will ordinarily prescribe a royalty rate which would be less favorable to the patentee. See *infra* note 80.

patent laws: creating an incentive for new technologies.[10] A basic assumption underlying most patent systems is that society is benefited more by the advancement of innovation than it is harmed by the grant of a monopoly to the inventor. Compulsory licensing provisions, however, may lessen the incentive to innovate by limiting the scope of the patentee's grant. This Comment will consider several of the more common grounds justifying compulsory licenses, particularly as they affect international transactions. After analyzing the dynamic between each theory's practical economic effect and general economic philosophy, the Comment will then question whether the current United States policy against general compulsory licenses remains viable in today's economic markets.

II. GROUNDS FOR COMPULSORY LICENSES

Several circumstances might prompt a government to revoke the previously bestowed exclusive patent right and force the patentee to share its invention. While such circumstances vary among the major trading partners of the United States, the compulsory patent theories can be roughly grouped into three categories:[11] adequacy of supply, public interest, and "worked in the country."

A. Adequacy of Supply

If the patentee is unable to meet the demand for its product under an exclusive right to manufacture and sell the product, it may be forced

10 The general objectives of the United States patent system were stated in Kewanee Oil Co. v. Bicron Corp, 416 U.S. 470, 480-81 (1974)(the authority of Congress to grant protection to the patentee was exercised in the hope that "the productive effect thereby fostered will have a positive effect on society through the introduction of new products and processes of manufacture into the economy, and the emanation by way of increased employment and better lives for our citizens"). Patents clearly protect the inventor by granting monopoly rights to the inventor; this protection may be particularly important to the small inventor who would otherwise be overwhelmed by large industry once the secret became public. P. SAMUELSON & W. NORDHAUS, ECONOMICS 508 (12th ed. 1985). The ultimate objective of patent laws, however, is to benefit society. Thus, patent laws must balance the inventor's interest in retaining control of the invention with the needs of society to have reasonable access to new products.

11 A fourth general category justifying a compulsory license exists in some countries. Designed to facilitate the use of improvement or dependent patents, it recognizes that occasionally a patent cannot be exploited without infringing a prior patent. This would occur when a later patent is actually an improvement or new use of an invention for which a patent is still in force. In such circumstances, the owner of the dominant (or prior) patent may be required to license to the owner of the dependent patent. Otherwise, the utility of the dependent patent would be frozen. This ground for compulsory licenses is currently in force in Austria, West Germany, Holland, Switzerland, and the United Kingdom. Neumeyer, *Compulsory Licensing of Patents Under Some Non-American Systems*, in STUDY OF THE SUBCOMM. ON PATENTS, TRADEMARKS, AND COPYRIGHTS OF THE SENATE COMM. ON THE JUDICIARY, 85TH CONG., 2D SESS. 28 (Comm. Print 1959).

to grant a license, often to a competitor. In the United Kingdom, for example, the law provides that a compulsory license may be granted on a patented product "where . . . demand for a product in the United Kingdom is not being met on reasonable terms . . . ."[12] Canada, Japan, and West Germany also justify compulsory licensing on this same ground.[13] This requirement is reasonable, both practically and philosophically. The original producer would respond to greater market demand by increasing production. Assuming that producers operate near capacity, any unfulfilled demand indicates that the original producer was unable to produce more. In this case, compulsory licensing enables another licensee to satisfy leftover demand without seriously infringing on the market of the original patentee. While the licensee would technically be a competitor, the terms of the license could minimize the actual conflict.[14]

On the other hand, permitting the competitor to enter the market eliminates the original patentee's monopoly position. According to basic economic theory, a monopolist will intentionally undersupply goods in order to maximize profits.[15] Thus, a patent holder would never actually meet the demand for the product that would exist at the competitive price, but instead would always produce at some lower than optimum level. Granting a compulsory license takes the original patentee out of its monopoly position, especially since the terms of the compulsory license are usually less favorable to the patentee than the terms of a voluntary license. While inhibiting monopoly use of the patent may reduce the incentive to innovate,[16] this risk is often justified to assure more complete utilization and commercialization of innovative products.[17]

Compulsory licenses granted under the adequate supply theory purposefully reduce the inventor's reward in order to increase the public availability of the goods. Strong compulsory license provisions reflect a government's belief that the inventor's incentives will not be reduced to

---

12 Patents Act of 1977, § 48(I)(3)(b)(i).

13 H. SCHADE, PATENTS AT A GLANCE: A SURVEY OF SUBSTANTIVE LAW AND FORMALITIES IN 50 COUNTRIES (3d rev. 1980).

14 An example of this practice is a territorially-limited license. *See generally* Girard, *Impact of United States Antitrust Laws on Territorially-Limited International Patent Licensing Agreements*, 11 U. SAN FRAN. L. REV. 640 (1977). For a discussion of the flexibility which is possible when drafting licensing terms, see Hersh, *Nonexistence of Set Standards for Royalty Rates*, PRACTICAL PATENT LICENSING 86 (A. Davis, Jr. ed. 1966).

15 P. SAMUELSON & W. NORDHAUS, *supra* note 10, at 502. *See also* Roberts v. Sears, Roebuck & Co., 697 F.2d 796, 797 (7th Cir. 1983)(Posner, J.)("[M]onopoly, among its other effects, results in a lower output of the monopolized product, and so reduces consumer welfare.").

16 W. BOWMAN, PATENT AND ANTITRUST LAW 3 (1973).

17 *See generally* F. SCHERER, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE 439-58 (2d ed. 1980).

the point of deterring research and innovation.[18]

B. Public Interest

Compulsory licenses based on the public interest are similar to those based on the adequate supply theory, but are only issued to control products especially vital to the public. These licenses commonly involve inventions relating to public health, welfare, or national defense—areas where the inventor's interest may be subordinate to that of the public.[19] United States compulsory license provisions exist within this narrow category. The examples are few, but include patents for pollution control devices under the Clean Air Act,[20] and patents involving nuclear materials.[21]

Nations do not agree what constitutes the "public interest." The United States has often[22] granted compulsory licenses as a remedy for violations of antitrust laws, reflecting the value of free enterprise and competition in the United States.[23] By contrast, in the Soviet Union any invention "of special importance to the state" is subject to compulsory

---

18 Research and innovation are well recognized objectives of a general patent system. *See supra* note 10.

19 Goldstein, *Duty to License*, 9 AM. PAT. L.A.Q.J. 351 (1981).

20 The Clean Air Act, 42 U.S.C. § 7401 *et seq.* (1970). *See also* A. SEIDEL, *supra* note 8, at 98. The mandatory licensing provision of the Clean Air Act reads:

> Whenever the Attorney General determines that, upon application of the Administrator -
>
> (1) that-
>
> (A) in the implementation of the requirements of section 7411, 7412, or 7521 of this title, a right under any United States letters patent, which is being used or intended for public or commercial use and not otherwise reasonably available, is necessary to enable any person required to comply with such limitations to so comply, and
>
> (B) there are no reasonable alternative methods to accomplish such purpose, and
>
> (2) that the unavailability of such right may result in a substantial lessening of competition or tendency to create a monopoly in any line of commerce in any section of the country,
>
> the Attorney General may so certify to a district court of the United States, which may issue an order requiring the person who owns such patent to license it on such reasonable terms and conditions as the court, after hearing, may determine . . . .

42 U.S.C. § 7608 (1970).

21 The compulsory license provisions of the Atomic Energy Act of 1948 had the expressed purpose of encouraging the use of atomic materials to expand energy supply. However, when the Act was amended in 1954, the policy with respect to compulsory licenses changed. 42 U.S.C. § 2183 (1982). Not only were the provisions designed to encourage use, but they were also aimed at providing for common defense and security. STAFF OF JOINT COMM. ON ATOMIC ENERGY, 83D CONG., 2D SESS., DRAFT IN BILL FORM INCORPORATING CHANGES PROPOSED TO BE MADE IN H.R. 8862 AND COMPANION BILL 3323 (Comm. Print 1954).

22 Compulsory licenses have been granted as a remedy in over 125 United States antitrust cases, usually at a "reasonable" royalty rate, but occasionally royalty-free. SENATE COMM. ON THE JUDICIARY, SUBCOMM. ON PATENTS, TRADEMARKS, AND COPYRIGHTS, 90TH CONG., 1ST SESS., COMPULSORY PATENT LICENSING UNDER ANTITRUST JUDGMENTS (Comm. Print 1960).

23 Girard, *supra* note 14. For example, compulsory licenses were granted as remedies for antitrust violations in United States v. Hartford-Empire Co., 46 F. Supp. 541 (N.D. Ohio 1942) and United States v. United States Gypsum Co., 340 U.S. 76 (1950). *See also* Moore, *A Study of Com-*

licensing.[24] The United Kingdom recognizes a public interest in the low-priced supply of goods used in the production of food, medicine, and surgical or curative equipment. Similarly, in Switzerland lowering prices may legitimately support a compulsory license for any patented good .[25]

In countries with limited industrial development, the "public interest" may be expanded to include the opportunity to develop national industry.[26] Recognizing that new technology is crucial to economic growth and employment, developing nations may subject foreign investors to compulsory licensing in order to gain access to technology which the nations could not otherwise develop. This limits an investor's control over the use of the invention, however, so compulsory licenses may deter foreign investment.[27] Given these competing interests, developing nations must fashion compulsory licensing laws that not only assuage the concerns of foreign investors, but also increase access to new technology vital to their economic development.[28]

Compulsory licensing schemes are justified on the ground that they increase public access to inventions. A government's ability to control the compulsory licensing process, however, may hinder innovation of products which promote the public welfare. A government has every incentive to grant a compulsory license for such an invention—even if demand is being met by current production—to ensure a more stable future supply. Thus the potential for compulsory licenses may encourage patentees to pursue inventions which do not promise widespread public benefit.

C. Worked in the Country

Besides using compulsory licensing to guarantee adequacy of supply and to promote the public interest, some countries use compulsory licensing to ensure that the invention be "worked in the country." Different interpretations of "worked," however, give rise to various

pulsory Licensing and Dedication of Patents as Relief Measures in Antitrust Cases, 24 GEO. WASH. L. REV. 223 (1955).

24 H. SCHADE, *supra* note 13, at 138.

25 *See* Neumeyer, *supra* note 11, at 31. The Swiss policy is representative of economic protectionism. The government actually expropriated a patent to prevent a machine from being sold to the United States, which as a result could have threatened a key Swiss industry. *Id.* at 27-28.

26 *Id.* at 44. For an analysis of the impact of patent systems in developing nations, see Haar, *Revision of the Paris Convention: A Realignment of Private and Public Interests in the International Patent System*, 8 BROOKLYN J. INT'L L. 77 (1982). *See also* Note, *Paris Convention, Patent Protection, and Technology Transfer*, 3 B.U. INT'L L.J. 209 (1985).

27 Neumeyer, *supra* note 11, at 44.

28 *Id. See also PTO Commissioner Hails Progress Made at Geneva Meeting on Paris Convention*, 25 Pat. Trademark & Copyright J. (BNA) No. 603, at 3 (1982)(exclusive compulsory licenses are "counterproductive to the transfer of technology to developing countries").

applications of the provision. United Kingdom law provides that a compulsory license may be issued, after a period of three years, "where the patented invention is capable of being commercially worked in the United Kingdom, that it is not being so worked or is not being so worked to the fullest extent that is reasonably practicable."[29] Other countries which also maintain a "worked in the country" provision include Canada, West Germany, Japan, Sweden, and Switzerland.[30]

In Austria during the 1870s the term "worked" was strictly interpreted. A foreigner who held an Austrian patent was required to manufacture the article in Austria within one year from the original grant or the patent would be revoked. This interpretation has been deemed "most vexacious."[31] In France, the term was historically translated into the term "fabrique," which implies building, making, or putting together.[32] France eventually revised its law, creating a more lenient requirement for development by the patentee.[33]

Under more modern interpretations, "worked" simply means "used." The patentee cannot hide his invention, but must exploit it and share its benefits even while maintaining exclusive rights to the profits. Application of this theory is consistent with general patent philosophies. New ideas are encouraged and the producer rewarded, but through compulsory marketing by the holder, the benefits of innovation are shared. Others gain access to the useful aspects of the technology, if not to the profits.[34] While this theory imposes a duty on the patentee to use the patent, should it meet this burden, its exclusive right to exploit the patent will not be disturbed.

The United States imposes no such duty on the ordinary patent holder. In *Hartford-Empire Co. v. United States*,[35] the United States Supreme Court noted that a patent owner "has no obligation to use [the patent] or to grant its use to others." Congress has repeatedly refused to create such provisions in United States patent laws despite their apparent

---

29 Patents Act of 1977, § 48(I)(3)(a). For a case which enforced the local manufacture requirement for a mechanical invention, see Zanetti-Streccia's Patent, 1973 R.P.D. & T.M. 227 (1972).

30 *See* H. SCHADE, *supra* note 13. For the home manufacture requirement in Canadian law, see Patent Act, CAN. REV. STAT., ch. 203 § 67(3)(1952); *see also* Rodi & Weinenberger AG v. Metalliflex Ltd., 40 C.P.R. 52 (1962).

31 Neumeyer, *supra* note 11, at 6.

32 *Id.* at 7.

33 Weinstein, *Analysis of the Amended French Patent Law*, 78 PAT. & TRADEMARK REV. 450 (1980).

34 For example, patent duration is 17 years in the United States and Canada, 20 years in France, Sweden, and Switzerland. H. SCHADE, *supra* note 13. The limited duration of the patent term is generally designed to provide a substantial reward to the inventor, but also to ensure than the invention will ultimately become part of the public domain.

35 324 U.S. 570 (1945).

accordance with broader patent system objectives.[36]

Japan's use of the "worked in the country" provision to discourage foreign imports[37] is a practice which reflects the heavy restrictions Japan places on foreign-owned business operations.[38] By requiring that some part of the invention be made in Japan, the rule serves "as a protectionist economic policy which conflicts considerably with the present international trade policy of the Western World."[39] Thus, while Japan effectively discourages straight importation (possibly the most desirable form of investment for United States companies), many Japanese concerns doing business in the United States have successfully exploited this same arrangement.[40]

A patent usually represents a new idea, one which by law must be useful, novel, and nonobvious.[41] The presence of such an innovation adds to the technological capacity of that country, and it is that very capacity which the patent laws seek to expand. "Worked in the country" provisions, by requiring actual assembly in the country, help those in the industry better understand the product's unique features. However, the provisions may not be critical. As long as the product is imported, reverse engineering[42] may help reveal the novel aspects of the invention. Moreover, these features must be clearly described in the original patent application.[43] Actual manufacturing within the country may or may not more effectively spread technological innovation, but any discrepancy between the methods would be eliminated over time.

Practical economics makes the "worked in the country" provision harder to justify. Business concerns will tend to manufacture, in whole

---

36 *See* STUDY OF THE SUBCOMM. ON PATENTS, TRADEMARKS AND COPYRIGHTS OF THE SENATE COMM. ON THE JUDICIARY, 85TH CONG., 2D SESS., COMPULSORY LICENSING OF PATENTS—A LEGISLATIVE HISTORY (Comm. Print 1958)[hereinafter COMPULSORY LICENSING—A LEGISLATIVE HISTORY].

37 4 Z. KITAGAWA, DOING BUSINESS IN JAPAN § 2.15(6)(1980).

38 Jones, *supra* note 6, at 82.

39 Neumeyer, *supra* note 11, at 3.

40 The success of Japanese imports into the United States needs little documentation. *See, e.g., Japan: The Most Important U.S. Bilateral Relationship*, BUS. AM. Oct. 31, 1983, at 5 ("Nearly all of what Japan sends overseas are manufactured goods.")[hereinafter *Japan*].

41 The three recognized requirements for patentability in the United States are specified in 35 U.S.C. § 101-03 (1982). The patent application must also "enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor for carrying out his invention . . . ." 35 U.S.C. § 112 (1982).

42 Reverse engineering is the process of taking apart a machine or other article to learn how it was assembled and designed. Access to the article thus may reveal much of the innovation which went into its manufacture. Chemical compounds can similarly be analyzed to determine their formulation, though this may prove to be more difficult in certain instances.

43 35 U.S.C. § 112 (1982).

or in part, where it is cheapest to do so. If it is cheaper to manufacture elsewhere and then import, the product will be available at a more reasonable price in the importing country. This result alone can support a compulsory license,[44] whereas a compulsory license requiring manufacture in a more expensive country solely to protect local suppliers is much harder to justify.[45]

III. THE UNITED STATES POSITION

A. Practical Opposition

General compulsory licensing laws have often been proposed in the United States.[46] Advocates have argued that misuse of a patent indicates the patent no longer serves the public interest which originally justified the grant, and therefore the protection should not continue. They further argue that the benefits to society flowing from proper patent use outweigh the added burden that compulsory licenses place on patentees.[47] Despite such arguments, general compulsory license laws have never been adopted in the United States.[48] Several reasons, which apply to both domestic and foreign patents, have been advanced for the current United States position.

1. Compulsory Licenses Are Simply Unnecessary

While compulsory licenses could be granted to remedy nonuse or patent suppression, some claim that actual misuse has not been proven.[49] Few actual instances of patent suppression have been identified,[50] and even in foreign jurisdictions with strong nonuse provisions, actual grants

---

44 *See supra* notes 12-18 and accompanying text.

45 Neumeyer, *supra* note 11, at 12.

46 *See generally* COMPULSORY LICENSING—A LEGISLATIVE HISTORY, *supra* note 36.

47 *See generally* Arnold & Janicke, *Compulsory Licensing Anyone?*, 55 J. PAT. OFF. SOC'Y 149 (1973).

48 The United States does grant compulsory licenses in special circumstances. *See supra* notes 20-23 and accompanying text. United States law also provides for compulsory licenses under the Copyright Act, 17 U.S.C. § 101-810 (1982). *See* Lee, *An Economic Analysis of Compulsory Licensing in Copyright Law*, 5 W. NEW ENG. L. REV. 203 (1982). For a United States case applying the compulsory license provisions of the Copyright Act, see Jondora Music v. Melody Recordings, 351 F. Supp. 572 (D.N.J. 1972).

49 Some would extend the argument to say that, if enacted, compulsory license laws would actually cause inventions to be kept secret. *See* COMPULSORY LICENSING—A LEGISLATIVE HISTORY, *supra* note 36, at 10. An inventor who did not plan to exploit his invention would be less likely to seek a patent if the possibility of a compulsory license existed. Under the current system, an invention's design becomes part of the public domain after 17 years.

50 Arnold & Janicke, *supra* note 47, at 150.

of compulsory licenses have been rare.[51] Relying on the existence of market incentives, this argument claims that nonuse is a myth—any patented invention important enough to sustain a compulsory license claim would already be exploited. Anyone who invests the time and money to develop a new invention and goes through the trouble to obtain patent protection[52] would probably exploit the invention to realize a return on that investment.[53] Simple economics suggest that a patent of a product having value in the marketplace would be used rather than suppressed. However, the 1908 case of *Continental Paper Bag Co. v. Eastern Paper Bag Co.*[54] exposes an instance where a potentially important patent was actually suppressed by its owner.[55] In this case, a valuable patent covering a manufacturing process was not being used by the patentee. The Supreme Court determined that the patentee could nonetheless enforce its patent rights and prevent a competitor from using the process, thus underscoring the primacy of a United States patent grant.

Despite the *Paper Bag* case and other examples of patent suppression,[56] the view has prevailed in the United States that such suppression is not sufficiently pervasive to warrant adoption of compulsory licenses.[57] Even if never granted, however, the mere possibility of a compulsory license might encourage a patentee either to exploit the patent by produc-

---

51 Whitaker, *Compulsory Licensing—Another Nail in the Coffin*, 2 AM. PAT. L.A.Q.J. 155, 162 (1974).

52 The average application pendency period in the U.S. Patent Office is 25 months. 1984 COMMISSIONER OF PATENTS AND TRADEMARKS ANNUAL REPORT 24 [hereinafter 1984 ANNUAL REPORT]. The Commissioner announced a goal to reduce this period to 18 months by 1987. *Id.* at 4. The costs associated with a patent application vary with the complexity of the patent. Typical costs range from $3,000 to well over $30,000. G. Ropski, Lecture to Patent and Copyright Law Class, Northwestern University School of Law (Feb. 2, 1987). For a complete listing of the filing fees for patents, see 37 C.F.R. §§ 1.16-.28 (1986).

53 Not all patents are useful or exploited; many do appear frivolous. The argument, however, refers to patents which would be targets of a compulsory license request—those to which access is wanted for exploitation. Such patents are probably being used to some extent. Consider the testimony of Thomas E. Robertson, former Commissioner of Patents: "All during the 12 years . . . that I was Commissioner of Patents, I heard a rumble every once in a while about suppressed patents, but *not once* did I know of any patent that controlled any industry that was being suppressed." COMPULSORY LICENSING—A LEGISLATIVE HISTORY, *supra* note 36, at 10 (emphasis added).

54 210 U.S. 405 (1908).

55 *Id.* at 424.

56 Another example of patent suppression involved Standard Oil of New Jersey's suppression of the Santopour pour-point depressant for lubricating oils. G. STOCKINGS & M. WATKINS, CARTELS IN ACTION 497 (1947). For a list of possible suppression cases, see *Economic Concentration, 3271: Hearings on S. Res. 233 Before the Subcomm. on Antitrust and Monopoly of the Senate Comm. on the Judiciary*, 90th Cong., 1st Sess. (1967). *See also* F. SCHERER, *supra* note 17, at 452 (any actual suppression would probably involve products "which for various reasons could not be produced as profitably as available inferior patents, or inventions whose use could upset the status quo in a delicately coordinated price-fixing scheme").

57 *See supra* note 53.

ing his product or to enter voluntary licensing agreements with competitors. Either way the product becomes more widely available.[58] Further, because *any* occurrence of patent suppression is sufficiently antithetical to the goal of encouraging new technology, compulsory licensing is justified.

2. *Compulsory Licenses Reduce the Inventor's Incentive to Develop New Technology*

In areas of new technology where research and development costs may be high and the success rate relatively low, the promise of a truly exclusive right to the invention may be needed to justify spending large sums in start-up costs.[59] Firms involved in sophisticated research want to be compensated not only for the expenses associated with the actual invention, but also for the costs of researching other ideas which prove to be neither patentable nor profitable. Any reduction in the level of control a patentee retains over the invention, or in the level of expected profits, could make innovation a less attractive enterprise.[60]

It is not certain, however, that compulsory licensing would lessen the incentive to invent. First, the original patentee would have established a market before the grant, which would put it at an advantage over competitors having to start "from scratch" to develop the product. Second, because most compulsory license provisions in foreign countries contain three- or four-year grace periods,[61] a party seeking the compulsory license must demonstrate that patent misuse or nonuse lasted continuously for at least three years. In rapidly changing areas of technology, three years may be greater than the truly useful life of the patent,[62] or may be the period during which the patent is the best-known

---

58 A patentee who prevents the invention from becoming known is (in effect) failing to give to society the know-how which justified the exclusive right in the first place. For a discussion of the contract theory of patent grants, see *infra* note 85 and accompanying text.

59 Henry, *supra* note 5, at 329.

60 "[M]en do not go into development of new things for an ordinary competitive profit. They have got to see a speculative profit in it or they will not go into it." COMPULSORY LICENSING—A LEGISLATIVE HISTORY, *supra* note 36, at 10 (testimony of Thomas Ewing, former Commissioner of Patents).

61 For example, the Paris Convention provides:

> A compulsory license shall not be applied for on the ground of failure to work or insufficient working before the expiration of a period of four years from the date of filing of the patent application or three years from the date of the grant of the patent, whichever period is last; it shall be refused if the patentee justifies his inaction by legitimate reasons . . . .

Paris Convention, *supra* note 2, art. 5A, para. 4. Similar provisions exist in the compulsory license laws of most countries. *See supra* note 29 and accompanying text.

62 By contrast, the argument has been raised that compulsory licensing provisions are unfair because the grace period is too short and that an inventor cannot be expected to develop fully and market the product in only three or four years. *See* COMPULSORY LICENSING—A LEGISLATIVE

technology before being supplanted by a newly developed alternative.[63] Either way, the original patentee has received nearly the full value of its patent before being threatened by a compulsory license. Third, some compulsory licensing systems provide flexible royalty rates. For example, the United Kingdom scheme considers several factors before the rate is set, including research costs, profit margin, and administrative and advertising expenses.[64] The patentee can receive not only a fair return on its investment under this system, but may retain the advantage of an established market position as well.[65]

It is likely that compulsory licenses would not lessen a patentee's motivation to invent, and also the public benefits by reducing the patentee's enjoyment of monopoly profits. Such a windfall is of particular harm to consumers when the demand for a product, like medicine, is inelastic[66] because the consumer in such a situation has little market choice.[67] In sum, the harm which compulsory licenses inflict on incentives to invent is probably outweighed by the resulting public benefits.

3. Compulsory Licenses Are Unconstitutional

The constitutional arguments against compulsory licensing take two forms. The first, derived from the text of the Constitution,[68] focuses on

---

HISTORY, *supra* note 36, at 10. ("It takes longer than 3 years to develop most inventions, and development costs are high.").

63 An overall impetus to invent and innovate is said to exist when a firm must develop alternatives to a given patent, to "leapfrog" the claims so as not to infringe. Arnold & Janicke, *supra* note 47, at 161. Compulsory licenses would eliminate the need for this effort and valuable innovation might be lost. However, it might also be true that effort spent in basically duplicating an existing patent might be better spent in working on a different problem, or at least improving the current technology rather than discovering creative ways to avoid infringement. *Compare* R. POSNER, ECONOMIC ANALYSIS OF LAW 36-37 (3d ed. 1986)(many provisions of the patent law are designed to avoid duplication of research).

64 Henry, *supra* note 5, at 330. *See also* Penn Eng'g & Mfg. Corp. 1973 R.P.D. & T.M. 233 (1972), a British case where a 5% royalty rate was applied to a compulsory license grant.

65 Several factors may influence an inventor's incentive to conduct research. Patent protection is clearly one factor, but may not always be controlling. F. SCHERER, *supra* note 17, at 448. *See also* Diamond v. Chakrabarty, 447 U.S. 303, 317 (1980)("The large amount of research that has already occurred when no researcher had sure knowledge that patent protection would be available suggests that legislative or judicial fiat as to patentability will not deter the scientific mind from probing into the unknown any more than Canute could command the tides").

66 Henry, *supra* note 5, at 330. Inelastic demand for a product means that demand does not respond, or responds only slightly, to changes in price. *See* P. SAMUELSON & W. NORDHAUS, *supra* note 10, at 380.

67 F. SCHERER, *supra* note 17, at 457 (intelligent compulsory license laws would "have little or no adverse impact on the rate of technological progress and would on occasion mitigate significant monopoly burdens"). *See also* COMPULSORY LICENSING—A LEGISLATIVE HISTORY, *supra* note 36, at 11 (statement of George Schultz).

68 The United States Constitution provides: "Congress shall have the Power . . . To promote the

the right of Congress to grant exclusive rights to promote science and the useful arts. The constitutional power to grant such an exclusive right, so the argument goes, may not carry with it the power either to encroach on that right or to grant a right conditioned upon subsequent government interference.[69] This argument has never been addressed directly by United States courts, because general compulsory licensing laws have never been passed. Commentators, however, have concluded that it would not be accepted by the courts.[70]

The second constitutional attack regards compulsory license provisions as a taking,[71] reflecting the idea that a patent grant is essentially a property right which is not to be taken without just compensation.[72] The long history of judicially approved compulsory licenses granted in limited instances raises a strong presumption in favor of their constitutionality.[73] Moreover, because a compulsory license is not usually granted without a carefully determined royalty rate, the patentee is justly compensated for its efforts.[74]

4. Compulsory Licenses Would Hurt the United States in International Trade

This argument[75] asserts that compulsory licensing would allow foreigners to enter and compete more easily in United States markets by providing access to any patented idea. Nations with fewer resources for research and development[76] would be able to obtain the fruits of United States research, combine such knowledge with their normally cheaper labor force, and establish a competitive advantage over United States industries.[77] It is ironic that a provision considered protectionist in other

---

Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries . . . ." U.S. CONST. art. I, § 8, cl. 8.

69 For a discussion concluding that compulsory licenses are an invasion of constitutionally granted property rights, see Pravel, *Say "No" to More Compulsory Licensing Statutes*, 2 AM. PAT. L.A.Q.J. 185 (1974).

70 *See infra* note 74.

71 Pravel, *supra* note 69, at 189.

72 A patentee who received the patent before compulsory licensing laws were enacted would have a stronger takings claim than if the laws had already existed because at the time the government issued the patent, the patentee had no reason to expect that the patent would be subject to later encroachment. Once patent laws are enacted, no patentee could have such expectations.

73 *See supra* notes 20-23 and accompanying text.

74 For a general discussion supporting the constitutionality of compulsory licensing, see Schechter, *Would Compulsory Licensing of Patents be Unconstitutional?*, 22 VA. L. REV. 287 (1935).

75 Arnold & Janicke, *supra* note 47, at 165.

76 *See supra* notes 26-28 and accompanying text.

77 Arnold & Janicke, *supra* note 47, at 168. *See also* Whitaker, *supra* note 51, at 168.

countries[78] is criticized in the United States as possibly injurious to local industry.

A foreign competitor's access to a compulsory license would depend a great deal on the actual form of a United States compulsory license law, and in particular on the grounds which would make a grant possible. This Comment has noted that the grounds for compulsory licenses currently used in other countries include adequacy of supply, public interest in the product, and "worked in the country" requirements. It is not clear that a foreign competitor could easily obtain a compulsory license under any of these formulations. Even if a competitor could, injury to United States manufacture is not inevitable.

Consider a compulsory license granted under the adequate supply theory. Such a license would issue only if the United States patent holder were unable or unwilling[79] to meet the existing demand. In a high demand market, the United States firm would be producing at a high rate as well as realizing a significant profit margin.[80] Should a compulsory license be issued to a foreign competitor having access to cheaper production, it is conceivable that the competitor could encroach upon the original patent holder's market and take away business. The original patentee could protect the product's market, however, by voluntarily licensing to a domestic competitor who would be subject to similar labor costs. Since the original patentee controls the terms of the license in this situation, it can avert any foreign threat to its advantageous market position as long as demand is met.[81] Satisfying demand for the product under this arrangement would preclude the government from granting a compulsory license to a foreign competitor.

Compulsory licenses granted under a public interest theory will pose more of a threat to domestic producers if "public interest" is not clearly defined.[82] In such situations the government has great flexibility in de-

---

78 Compulsory licenses are often employed in other countries to protect local industry and employment. *See supra* notes 29-40 and accompanying text.

79 As previously noted, economic theory suggests that a monopoly holder will intentionally undersupply in order to maximize profits. *See supra* note 15.

80 A monopolist who had calculated to undersupply the market would nonetheless be producing at a significant rate, and would increase production if it were determined that consumers were willing to pay more. *See* P. SAMUELSON & W. NORDHAUS, *supra* note 10, at 511. Such a rate of production might not constitute the extreme case of undersupply needed to support a compulsory license grant under the adequacy of supply theory, although the possibility of such a grant would depend on the specific provisions adopted.

81 *See* Girard, *supra* note 14; *see also* F. SCHERER, *supra* note 17, at 442. ("Through astute determination of the royalty rate, the patentee can in theory achieve the same price-quantity outcome and profits as they could retaining exclusive exploitation, other things . . . being equal"). *See also* McGee, *Patent Exploitation: Some Economic and Legal Problems*, 9 J.L. & ECON. 135 (1966).

82 For example, in West Germany, compulsory licenses have been granted under the public

termining which products fall into this category. If the eligible products are clearly specified in the provisions, however, then firms would have the opportunity to arrange advantageous contractual licenses to avoid the possibility of a compulsory license grant. The United States currently specifies certain areas of public interest which warrant compulsory licenses,[83] but these provisions have not allowed foreign competitors to injure United States firms.[84] As long as public interest is clearly defined, domestic manufacturers are adequately protected.

"Worked in the country" provisions are adopted to assure local manufacture, but do nothing to aid foreign industry. A foreign competitor manufacturing outside the United States would be unable to obtain a compulsory license under this provision. This theory would, however, permit a United States company to obtain a compulsory license from the government when a foreign company having a United States patent imports the product into the United States. While such a grant would not guarantee that the United States firm could match the price of the import, it would offer the firm a chance to compete, which means local industry would be in no worse position than without the license. As with compulsory licensing systems generally, this theory would give United States firms greater access to the innovations of foreign competitors holding United States patents, because it would permit the government to force foreign companies to share their technology. Compulsory license provisions adopted by the United States would not realistically threaten local firms competing overseas, but rather would aid United States companies when foreign companies holding United States patents compete in the United States.

B. Theoretical Opposition

The practical arguments against compulsory licensing in the United States—that such licenses are unnecessary, reduce incentives to develop new technology, are unconstitutional, and increase foreign competition—are relatively weak. However, opponents of compulsory licenses may gain more support from theoretical positions on contract and property rights, as well as from general attitudes regarding the United States position in world trade. As a matter of contract theory, patent grants consti-

interest theory for products involved in coal mine safety conditions, electricity supply, mechanization of bread production, and general protection of business exports. Neumeyer, *supra* note 11, at 45.

83 *See supra* notes 19-23 and accompanying text.

84 One of the recognized purposes of compulsory licensing is to provide for common defense and security. *See supra* note 21 and accompanying text. With national security as a goal of the compulsory licensing scheme, it is extremely unlikely that such a license would be granted to a foreign firm.

tute an agreement between the government and the inventor,[85] wherein the inventor agrees to reveal the discovery and the means to use it in return for the government's promise of a seventeen-year monopoly on the production of the idea. Under this view, compulsory licensing may be interpreted as a failure of consideration on the part of the government, or even a breach of contract should a compulsory license be granted retroactively. If contract principles are highly valued, then this theory emerges as a strong theoretical basis for opposing compulsory licenses.[86] If a patent is considered the property of its owner, the patentee becomes free to use or not use, or license or assign, at will. Under this theory, compulsory licenses may constitute a taking. Even if compulsory licenses do not acquire the constitutional dimensions of a taking,[87] they still have been considered "a totally inappropriate expropriation of private property."[88]

The United States attitude towards its role in the world market also vitiates the need for a compulsory license system. United States companies historically have been more successful exploiting overseas markets than foreign firms have been in the United States.[89] While general protectionist legislation has often been helpful,[90] much of the United States success can be attributed to its dominant role in the development of technology.[91] Developing nations may need compulsory licenses to help bring technology into the country,[92] but up to this point the United States has not perceived a similar need.[93]

Today, however, the situation is changing. The United States consumer markets are being exploited with great success by the Japanese,

---

85 For a judicial discussion of the contract theory of patents, see Application of Tenney, 254 F.2d 619 (C.C.P.A. 1958); Application of Bayer, 568 F.2d 1357 (C.C.P.A. 1978).

86 *See supra* note 58 and accompanying text.

87 *See supra* note 71 and accompanying text.

88 *Paris Convention Talks Fail to Reach Agreement on Compulsory License Issue*, Pat. Trademark & Copyright J. (BNA) No. 673, at 519 (Mar. 29, 1984).

89 The patent systems of most nations are dominated by foreigners; only a few nations are actually net exporters of technology. For a number of reasons, weaker nations may be less willing to support the concept of strict reciprocity in licensing arrangements. Davidow, *Developing Countries and U.N. Rules Regarding Restrictive International Licensing, reprinted in* EVALUATION, EXPLOITATION AND ENFORCEMENT OF FOREIGN PATENTS I-2 (American Patent Law Association Seminar 1980).

90 *See generally* Ray, *Changing Patterns of Protectionism: The Fall in Tariffs and the Rise in Non-Tariff Barriers*, 8 NW. J. INT'L L. & BUS. 285 (1987).

91 Hatter, *Foreign Competitors Are Challenging U.S. Leadership in High Tech Trade*, BUS. AM., Apr. 1, 1985, at 20 ("The United States has long been a global technology trade leader. Now, however, several foreign competitors are strongly challenging the U.S. leadership position.").

92 *See supra* notes 26-28 and accompanying text.

93 Compulsory licenses are used in other countries to meet problems which do not exist in the United States. *See* COMPULSORY LICENSING—A LEGISLATIVE HISTORY, *supra* note 36, at 10.

West Germans, and others. The United States trade deficit was $171 billion in 1987,[94] compared with a $79.8 billion surplus in Japan's trade balance for the same period.[95] Foreign companies are also assuming a more dominant position in United States patent holdings. In 1969, for example, 25% of United States patents granted went to foreign investors.[96] By 1987 this figure had risen to 47%.[97]

A particular example of the need for compulsory licensing is found in our relations with Japan. In 1980, the top ten Japanese patent-holding companies held 1,916 United States patents; by 1985, that figure had more than doubled to 4,018.[98] The relatively infrequent granting of compulsory licenses[99] may not be a fair measure of their true effect. It is a largely prophylactic provision,[100] one which might incline a patent holder to license voluntarily even where he might otherwise have preferred to maintain his exclusive right. Any voluntary licensing, however, does not provide total protection from a compulsory license, because the extent of its use is still subject to review whether the use is exclusive or not.[101] That review would fall under the adequacy of supply, public interest, or "worked in the country" categories of compulsory licensing.

---

94 Wessel, *Narrower Trade Deficit of $12.2 Billion in December Suggests Worst May Be Past*, Wall St. J., Feb. 16, 1988, at 2, col. 3 (Midwest ed.).

95 Darlin, *Japanese Figures Paint Murky Picture, But Trade Surplus Is Seen Shrinking*, Wall St. J., Jan. 20, 1988, at 25, col. 1 (Midwest ed.). Japan's surplus with the United States alone amounted to $52.1 billion in 1987. *Id. See also Big U.S. Trade Deficit Supplants Debt Crisis as Top Economic Peril*, Wall St. J., Oct. 20, 1986, at 1, col. 6 (Midwest ed.). While several factors work to create such a deficit, rates of currency exchange may be the single most important factor. Hatter, *supra* note 91, at 62.

96 S. LADAS, *supra* note 5, at 448.

97 Editorial, *A Disturbing Slip in the Patent Race*, Chicago Trib., Mar. 3, 1988, § 1, at 18, col. 1. In 1970, Japanese held 4% of all United States patents; in 1984 they held 16%. Meanwhile, the share of worldwide patents held by United States residents has declined. In 1975, United States residents held approximately 32% of all patents worldwide; by 1984 they held only 22%. The trend is clear. DERWENT, INC., WORLD PATENT INDEXES ON DIALOG TRAINING 5 (1985). *See also* McMahon, *Patents Better Protected, But Look Who's Getting Them*, Wall St. J., Mar. 3, 1986, at 28, col. 3 (Midwest ed.)("Strong as the U.S. surge in R & D [research and development] has been and as solicitous as Congress, the Justice Department and the courts are being of the need to strengthen intellectual property, it is mostly foreign companies that are acting to reap the benefits.").

98 *Japanese Technology Today*, 255 SCI. AM. 85 (Nov. 1986).

99 In Great Britain between 1959 and 1968, 16 general compulsory licenses were requested; only 2 were actually granted. Grants of compulsory licenses were somewhat higher with respect to patents covering drugs and medicines. *See* COMMITTEE TO EXAMINE THE PATENT SYSTEM AND PATENT LAW, THE BRITISH PATENT SYSTEM 214 (1970).

100 Neumeyer, *supra* note 11, at 50. Neumeyer concludes that compulsory licenses are effective even when not granted, as they tend to encourage the spread of technology and to enhance competition.

101 A patentee who has already voluntarily licensed is not automatically immune from a compulsory license under the provisions of most countries. The extent of the use is still evaluated under the same criteria discussed throughout this Comment. Where the licensee is actively producing as well, however, it is less likely that a compulsory license would be found necessary.

Otherwise, a patent holder could easily defeat the provision by creating a dummy licensee.

Perhaps the most persuasive argument lies in the comparative advantage created in other countries by the effective patent protection in the United States. It appears that foreign companies holding United States patents have more freedom to exploit their inventions in the United States than United States citizens do overseas. Largely due to the recent creation of the Federal Circuit Court of Appeals to adjudicate patent appeals, more patents have been recently held valid in the United States than ever before, and United States patent holders have been receiving higher damage awards in infringement suits.[102] By contrast, no similar strengthening of patents systems has occurred in other countries. Thus, "[f]oreign competitors seem to get a better shake in the United States than American companies do abroad." [103] The inequities in patent infringement enforcement reflect a larger pattern of abuse of United States intellectual property rights in general, a problem of serious magnitude in international trade.[104] If the recent crisis-level political rhetoric about international "competitiveness" is to be believed, perhaps compulsory licensing is an idea whose time has come.

C. A United States Compulsory Licensing Scheme

The United States would have a number of options in fashioning a compulsory licensing scheme[105] that would rectify these inequalities in enforcement. First, the United States could adopt strict "worked in the country" provisions which would both protect local industries and provide the most direct access to foreign technology. Under such a scheme, the foreign patent holder would have to manufacture in the United States to protect the patent from compulsory licensing. This provision, however, would have two adverse consequences. Most apparently, the cost of producing the patented good would be higher in the United States because manufacture in the United States tends to be more expensive than

---

102 Perry, *The Surprising New Power of Patents*, FORTUNE, June 23, 1986, at 57. The Federal Circuit Court of Appeals was created in October 1982, replacing the old Court of Customs and Patent Appeals. The Federal Circuit has become the single depository for patent cases appealed from the United States district courts. *Id.* at 60. The Federal Circuit, under Chief Judge Markey, has been successful in adding strength and uniformity to the United States patent system. *Id. See also* McMahon, *supra* note 97.

103 Perry, *supra* note 102, at 64.

104 *Commerce Department Program Seeks Greater Protection for U.S. Intellectual Property Rights*, BUS. AM., Mar. 18, 1985, at 3.

105 Arnold & Janicke, *supra* note 47, at 152 ("The United States is an island in a sea of nations wherein compulsory licensing is an idea which has reached its time.").

in other countries.[106] As a result, the good will be higher priced and thus less available than if it had been produced elsewhere. Also, foreign investment might be deterred.[107] Extreme provisions such as these could actually frustrate greater United States access to foreign technology.

As a second option, the United States could adopt a "worked in the country" provision and apply it reciprocally against those countries which require it of United States holders of foreign patents. While the reciprocal nature of the provision makes it attractive,[108] if based on nationality[109] it might violate the "most favored nations" provision of the GATT. Also, Japanese laws expressly provide that "a foreigner can get a patent in Japan if his country treats Japanese citizens like their own with respect to industrial property rights."[110] Japan's patent laws apply equally to its own citizens and to foreign companies alike.[111] Treating Japanese holders differently than United States holders would jeopardize all Japanese patents held by United States investors.

Third, the United States could adopt more lenient "worked in the country" provisions. Such provisions could strengthen the United States position in world technology, because foreign-held patents containing technological advances not worked in the United States would be subject to compulsory licensing.[112] Even if rarely granted, the law would encourage voluntary licensing contracts between foreign and United States firms.

Some would argue that a nation's position in technological production is determined more by effective incentives for innovation than by licensing, and that compulsory licenses reduce those incentives.[113] The

---

106 W. LOVETT, WORLD TRADE POLICY 247, Table A-8 (1987).

107 Neumeyer, *supra* note 11, at 44. United States compulsory license laws would reduce foreign investment in the United States because foreign firms would have less control over their inventions. *See Japan*, *supra* note 40, at 5 ("[J]apanese investment in the United States is now rapidly out-pacing U.S. investment in Japan.") This trend could be slowed by adopting compulsory license provisions.

108 Many developing nations may not adhere quite as readily to the concept of reciprocity in patent systems. See Davidow, *supra* note 89, at I-2. The 4th Session of the Diplomatic Conference on the Revision of the Paris Convention for the Protection of Industrial Property ended in a stalemate "because developed and developing countries could not agree on proposed provisions dealing with the exclusive compulsory licensing of patents." 1984 ANNUAL REPORT, *supra* note 52, at 2.

109 *But cf.* Schenck v. Nortrom Corp, 713 F.2d 782, 784 (Fed. Cir. 1983)(Markey, C.J.) ("participation in the U.S. patent system, as patentees and as licensees, is available to citizens and noncitizens alike.").

110 4 Z. KITAGAWA, *supra* note 37, at § 1.03(1).

111 *Id.*

112 Requiring local manufacture may not always be beneficial. *See supra* note 45 and accompanying text. Importation may be nearly as effective in teaching the art of the invention. *See supra* note 42.

113 *See* Arnold & Janicke, *supra* note 47, at 152 (commenting on the Canadian compulsory li-

current trend in the United States[114] provides evidence to the contrary. The United States currently offers stronger patent incentives[115] than most of its competitors, yet continues to lose ground in the development and sale of new technology. If anything, those stronger incentives have induced foreigners into the United States patent system by allowing foreign companies complete control over their inventions, rather than effectively encouraging more innovation from United States nationals. Compulsory licensing would remedy this problem.

IV. CONCLUSION

While most countries provide for compulsory patent licensing, the United States does not. An analysis of the rationales given for many compulsory licensing systems may suggest the United States position to be a mistake, because compulsory licensing advances a nation's technological development. In accordance with the broad objectives of patent laws, compulsory licensing encourages the production and use of patented goods and increases access to advanced technology.

Carefully constructed compulsory licensing laws would help restore a balance between the patent system of the United States and those of other countries. To avoid issuance of a compulsory license, foreign holders of United States patents would be encouraged by these laws to grant licenses to domestic producers. Even if foreign producers choose to import, a compulsory license granted under appropriate circumstances would still result in a domestic producer. Either way the United States economy benefits. Further, as this Comment has suggested, such provisions would not significantly reduce the rewards and incentives currently offered to inventors, particularly when applied to domestic patentees.

The tendency of the United States to supply the world with technology made its access to foreign technology unimportant in the past. Today, however, the growing technological capabilities of many foreign countries warrant renewed consideration of not only this shift in scientific ability, but of compulsory patent licensing as well.

Cole M. Fauver

---

cense provision, recent law "sacrifices the public interest in competitive research and development upon the altar of worship of competitive prices—a false god . . . .").

114 *See supra* notes 94-97 and accompanying text.

115 The stronger incentives in the United States include imposing fewer restrictions on patent holders, *see supra* note 35 and accompanying text, and offering a stronger patent system, *see supra* note 102 and accompanying text.